



November 19, 2007

Sent via email

Eric Johnson
U.S. Environmental Protection Agency
Region 8, 8ENF-T
999 18th Street, Suite 300
Denver, Colorado 80202-2466

RE: Progress report for October 2007 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Mr. Johnson:

Per paragraph 64 of the Order, enclosed is a copy of the October 2007 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Glader", written over a horizontal line.

Paul L. Glader
Manager Environmental Services

Encl

Cc: HMC Legal Dept (w/o attachments)
John Jacus, Esq. (DG&S)



November 19, 2007

Sent via U.S. Mail

Glenn Rogers, Chairman.
Shivwits Band of Paiute Indian Tribe
P.O. Box 448
Santa Clara, Utah 84765

John Krause
Bureau of Indian Affairs Phoenix Area Office
U.S. Department of Interior
P.O. Box 10
Phoenix, AZ 85001

Kelly Youngbear
BIA Southern Paiute Agency
P.O. Box 720
St. George, UT 84771

RE: Progress report for October 2007 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Chairman Rogers, Mr. Krause and Ms. Youngbear:

Per paragraph 64 of the Order, enclosed is a copy of the October 2007 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

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A handwritten signature in black ink, appearing to read "P. Glader", written over a horizontal line.

Paul L. Glader
Manager Environmental Services

Encl

Cc: HMC Legal Dept. (w/o attachments)
John Jacus, Esq. (DG&S) (w/o attachments)
Eric Johnson (USEPA, Region VIII) (w/o attachments)



November 19, 2007

MEMORANDUM TO: Apex File

COPIES TO: distribution

FROM: Paul Glader

SUBJECT: Progress Report No. 42 for period ending October 31, 2007; Pond 2 Final Closure - Apex Site, Washington County, Utah

Summary

The monthly visual inspection, per the long term monitoring plan, was conducted on October 25. No unusual conditions were noted.

Per September's report, the St. George area received in excess of 2 inches of rain later in September. The site appeared to have received much less, however a minor amount of gullying has occurred on the northeast side of the area. This minor surface erosion will be repaired in the near future. Doug Gibbs, MEI, was on site October 27 to review conditions. Doug noted minor erosion at three locations on the NE side of the impoundment. Surface repairs will be made in late 2007 or early 2008.

The settlement monuments were surveyed September 26 by Alpha Engineering Company, no appreciable settlement was noted.

MEI completed a review of the Surface Monument Survey Data, report dated October 1.

Discussion

1. Surface Monitor Results To Date – Since monitoring of the top surface began (Jan 4, 2006), there has been no appreciable movement in the surface monuments at the Apex site. Settlement rates in general have decreased during 2007 in comparison to 2006. There are no concerns to date with settlement. As expected with long-term consolidation, the data shows that settlement rates are decreasing over time.

Work Planned for Next Period

1. Visual inspection of site.
2. Settlement monument survey – quarterly basis.

Sampling and Analysis in Period

Field Tests, Inspections & QA/QC

1. The monthly post closure site inspection was done on October 25; a copy of the inspection report is included in the Supplemental Attachments section.
2. The monuments were surveyed on September 26; a copy of the survey report is included in the Supplemental Attachments section.
3. A copy of the Surface Monument Survey Data Review dated October 1 is included in the Supplemental Attachments section.

Cost and Schedule

Committed costs in October 2007 were \$795. Total project to date committed is approximately \$1,247,000. The cost report for October is attached.

Current status of the deliverables listed in the RCRA 7003 order includes:

Deliverable	Reference Paragraph	Due	Remarks
Post warning signage around perimeter of site	57	15 days after effective date of order	Work completed on March 9, 2004
Begin implementation of closure plan	63	45 days after receipt of filing of order	Work started on February 23, 2004
Monthly progress reports	64	28 th day after close of month	Requirement in effect after order is filed.
Completion report	66	30 days after completion of all closure plan tasks	Construction completion report submitted on 3/13/2006. A follow-up report to be issued after end of monitoring period.

The update of the schedule milestones includes:

Milestone	Target	Actual	Remarks
Issue bid package – Phase I (Sump Drains)	6/14/04	6/15/04	Portion of RFP materials Issued at pre-bid on 6/14/04; remainder sent via courier
Issue RFP package – Phase III	6/24/04	6/24/04	
Award contract for Phase I	6/24/04	6/29/04	Date contract was shipped to Hughes
Pre-bid meeting – Phase III	7/19/04	7/19/04	
Start Phase I (Sump Drains) construction	7/12/04	7/19/04	
Start Phase II (Evaporation)	7/19/04	7/29/04	
Receive bids for Phase III	8/2/04	8/2/04	
Re-bid Phase III contract package	April 2005	4/27/05	Date bid package was sent to Hughes
Start Phase III construction	End of August 2005	8/29/05	Start of contractor mobilization
Complete Phase III construction	Dec 23rd 2005	12/23/05	Completion of contract scope of work
Issue Construction Completion Report	Week of 3/13/2006	3/13/06	

Supplemental Attachments

1. October 25, 2007 long term inspection report, by D. Truman.
2. October Cost Report
3. Monument monitoring – September 26, 2007 report attached, by Alpha Engineering Company.
4. Surface Monument Survey Data Review – October 1, 2007 report attached, by Monster Engineering Inc.

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 1 of 4 - Summary

Date: <u>10-25-07</u>			
Inspector: <u>Truman</u>			
Cover System Component	Potential Problem	Allowable Limits	Limits Potentially Exceeded
Site Perimeter	Erosion or Fencing Issues	NA	NA
Cover System (outcrops, top, rock)	Subsidence	Minor: ponding < 1" some gullying / erosion	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
		Significant: see Table 2	Yes <input type="checkbox"/> * No <input type="checkbox"/>
	Embankment Slope Stability	excessive movement or surface cracks > than 1"	Yes <input type="checkbox"/> * No <input type="checkbox"/>
	Gullying	on top	depth > 1" <input checked="" type="checkbox"/> * NA
		at embankment crest or on outslope	depth > 2" Yes <input type="checkbox"/> * No <input type="checkbox"/>
		w/in normal flow channel in diversion channel	no gullying allowed Yes <input type="checkbox"/> * No <input type="checkbox"/>
		w/in diversions at toe of impoundment outslope	no gullying allowed Yes <input type="checkbox"/> * No <input type="checkbox"/>
		in diversion channel at any other location	NA NA
	Erosion Protection Stability	rock subsiding or missing	Yes <input type="checkbox"/> * No <input type="checkbox"/>
	Seepage	no colored seepage allowed (red, blue, yellow w/ crystallization)	Yes <input type="checkbox"/> * No <input type="checkbox"/>
Runoff Control System	Diversion Channel	rock in place, channel not moving, fence stable	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
	Diversion Swales	rock in place, no silting in or head cutting	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>
	Excessive silt build up at fence lines in diversion channel	allowed if not effecting cover system	Yes <input checked="" type="checkbox"/> * No <input type="checkbox"/>

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 2 of 4 - Site Perimeter

Inspection Date: <u>10-25-07</u>	
Inspector: <u>TR</u>	
Visible Outlying Areas	
Observed Condition:	<u>No Change</u>
Observed Damage:	<u>None</u>
May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Property Boundary Fence and Gate (walk fence line)	
Observed Condition:	<u>one Sign had come off.</u>
Observed Damage:	
Potential Corrective Actions:	<u>Fix Sign</u>
May require repair: Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	
All Upgradient Areas (areas that drain onto property)	
Observed Condition:	<u>None</u>
Observed Damage:	<u>None</u>
May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: <u>10-25-08</u> Inspector: <u>TRM</u>			
Outslopes			
Observed Performance:	Rock Cover Subsidence:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Excessive Slope Movement (failure):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Gully Development:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	Observable Leachate (colored):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Excessive Siltation (at slope toe):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage:	<u>Some gullying on North side</u>		
Potential Corrective Actions:	<u>Rock to slow water flow</u>		
Top (top surface soils)			
Observed Performance:	Cracking (>1" width):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Settlement / Evidence of Ponding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Erosion / Gullyng:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage:	<u>None</u>		
Potential Corrective Actions:	<u>None</u>		
Erosion Protection Layer (rock)			
Observed Performance:	Rock Staying in Place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Rock Subsiding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Missing Rock:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage:	<u>None</u>		
Potential Corrective Actions:	<u>None</u>		

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

Date: <u>10-25-07</u>			
Inspector: <u>TR</u>			
Diversion Channel			
Observed Performance:	Erosion Protection in place:	Yes <u>X</u> No <u> </u>	May require repair: Yes <u> </u> * No <u>X</u>
	Normal Flow Channel in place:	Yes <u>X</u> No <u> </u>	May require repair: Yes <u> </u> * No <u>X</u>
	Encroaching on Site Fencing:	Yes <u> </u> No <u>X</u>	May require repair: Yes <u> </u> * No <u>X</u>
Observed Damage: <u>None</u>			
Potential Corrective Actions: <u>None</u>			
Diversion Swales			
Observed Performance:	Erosion Protection in place:	Yes <u>X</u> No <u> </u>	May require repair: Yes <u> </u> * No <u>X</u>
	Flow Channel Silting In:	Yes <u> </u> No <u>X</u>	May require repair: Yes <u> </u> * No <u>X</u>
	Head Cutting:	Yes <u> </u> No <u>X</u>	May require repair: Yes <u> </u> * No <u>X</u>
Observed Damage: <u>None</u>			
Potential Corrective Actions: <u>None</u>			

* Mark all areas of concern or requiring repairs on attached site map.

Activity	2004 Budget	Revised Budget May 2004	Committed Cost this Period	Cumulative Committed Cost To Date 10-31-07	Forecasted Cost To Complete	Forecasted Final Cost	Remarks on Forecast to Complete
Phases I through III (Completed February 2006)							
Phase I - Drain Excess Liquid From Tailings	189,200	72,700		67,928	0	67,928	
Phases II, IIA + IIB - Evaporate Excess Liquid	6,000	8,000		242,882	0	242,882	
Phase III - Regrading & Final Cover System	337,000	342,050		504,742	0	504,742	
Field Indirect Costs	164,500	213,568		378,517	0	378,517	Includes Jan + Feb 2006 long term monitoring costs
Hecla Costs	18,700	18,700	0	33,324	0	33,324	
Subtotal Phases I through III	715,400	655,018	0	1,227,393	0	1,227,393	
Long Term Monitoring (through FY 2010)							
Site Inspections			155	3,993	692	4,685	
Settlement Monitoring				4,725	5,400	10,125	
Consultant Support:							
Annual Geotechnical Engineer Inspections			0	2,495	18,100	20,595	Includes settlement monitoring data analysis
Vegetation Monitoring			0	0	20,000	20,000	Allowance for surveys in FY 2008 - 2010
Site Conditions Review - MEI			640	3,801	6,000	9,801	
Site Conditions Review - SVL Analytical			0	2,079			
Maintenance:							
Erosion Repair Allowance			0	0	7,500	7,500	
Overseeding Allowance			0	0	9,920	9,920	
Hecla Project Management Costs:							
Labor			0	2,268	7,909	10,175	
Travel expenses			0	0	1,312	1,312	
Subtotal Long Term Monitoring	0	0	795	19,359	76,833	94,113	
Total Pond 2 Final Closure	715,400	655,018	795	1,246,752	76,833	1,321,506	



ALPHA ENGINEERING COMPANY

148 East Tabernacle, St. George, UT 84770 • (435) 628-6500 • Fax: (435) 628-6553

**HECLA MINING SITE
MONUMENT MONITORING
(AS-BUILD DATE: SEPTEMBER 26, 2007)**

Monument #	Northing	Easting	Elevation	Remarks
#1	10121.35	10130.72	3685.61	Top alum. cap
#2	10146.01	10277.47	3685.73	Top alum. cap
#3	10092.31	10417.33	3686.03	Top alum. cap
#4	9966.65	10489.50	3685.71	Top alum. cap
#5	9865.67	10437.08	3686.44	Top alum. cap
#6	9807.81	10293.13	3686.29	Top alum. cap
#7	10013.31	10283.62	3686.99	Top alum. cap
#8	9989.92	10130.34	3685.74	Top alum. cap
#9	9862.83	10149.33	3685.63	Top alum. cap
#10	10006.02	9997.80	3678.00	Top alum. cap
#11	9964.22	10309.03	3684.59	Top alum. cap

MONSTER ENGINEERING INC
ENGINEERING DESIGN MANAGEMENT

3031 banner spring ranch road
leforts, colorado 80535

(970) 221-7177
fax (970) 224-0161

email: monster@peckpeck.com



MEMORANDUM

PC
10/1/07

TO: Paul Glader (Hecla Mining Company)
FROM: Doug Gibbs (Monster Engineering Inc.)
DATE: 10/1/07
SUBJECT: **Surface Monument Survey Data Review – Apex Site**

Surface monument surveying has been conducted at the Apex Site by Alpha Engineering since January of 2006. Based on data collected through September 2007, the elevation of the reclaimed impoundment top surface has in general decreased very slightly.

Settlement rates have in general decreased during 2007 in comparison to 2006. All data has been corrected based on maintaining a zero elevation change at Monument #10 (at the gate). This monument (#10) is the baseline from which all other monuments are surveyed, is located outside of the impoundment, and should show no movement between monitoring periods. Total and 2007 survey monument elevation changes since installation are shown in the following table.

Monument	Total Elevation Change Jan. 4, 2006 to Sept. 26, 2007		Elevation Change - 2007 Dec. 28, 2006 to Sept. 26, 2007	
	(feet)	(inches)	(feet)	(inches)
1	-0.08	-1.0	0.00	0.0
2	-0.07	-0.8	-0.03	-0.4
3	-0.12	-1.4	-0.02	-0.2
4	-0.01	-0.1	0.01	0.1
5	-0.03	-0.4	-0.01	-0.1
6	0.00	0.0	0.03	0.4
7	-0.20	-2.4	-0.04	-0.5
8	-0.08	-1.0	-0.04	-0.5
9	-0.05	-0.6	0.02	0.2
10 (baseline @ gate)	NA	NA	NA	NA
11 / Main (impoundment center)	-0.01	-0.1	0.02	0.2
Average	-0.06	-0.8	-0.01	-0.1

NA – baseline monument - data corrected to show no movement

To date it appears that most period to period apparent movement can be attributed to surveying accuracy limitations as this data shows individual monuments both increasing and decreasing in elevation. However, when data for all monuments is "corrected" by keeping the baseline

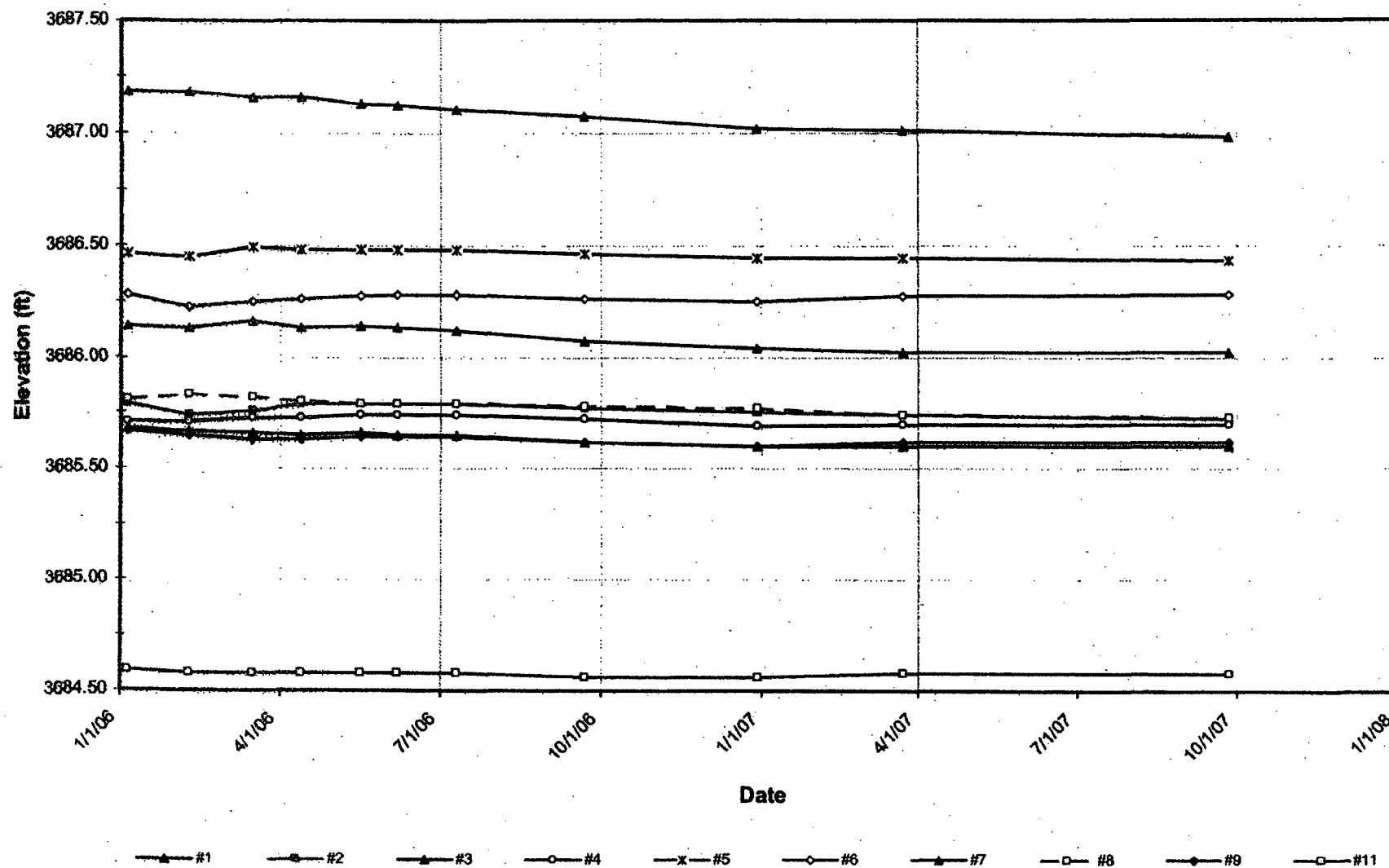
monument's (#10) elevation change to zero, then a general trend of decreasing elevations becomes apparent.

In summary the data shows that roughly the northern half of the impoundment has settled between 0.05 and 0.2 feet. The southern half of the impoundment has remained very consistent with little to no settlement. The largest measured settlement is, as expected, near the center of the impoundment (#7, -0.2 feet). Slightly greater settlement in and nearer the center of the impoundment is to be expected as significant quantities of fill were placed in this area during construction. Additionally, greater settlement should be expected on the northern half of the impoundment based on the locations and methods utilized to place the original cover materials (prior to final reclamation activities). According to Chris Gypton and Alan Wilson, cover materials were initially placed in the southwest corner and generally moved across the impoundment towards the northeast corner. This created a mud wave of unconsolidated waste which moved towards this corner, and eventually a thicker deposit of unconsolidated waste materials.

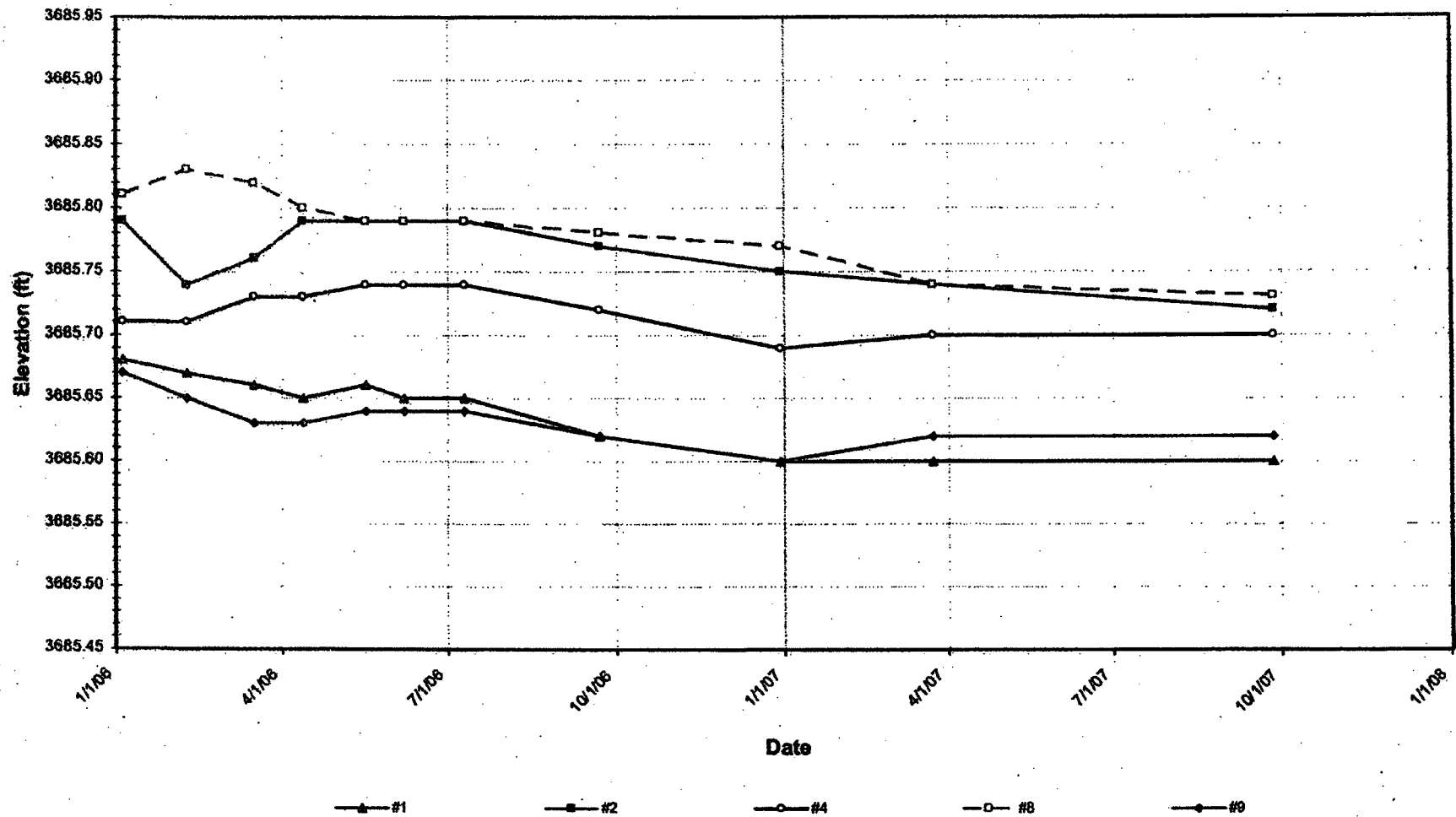
There appear to be no concerns to date with settlement. As expected with long-term consolidation, the data shows that settlement rates are decreasing over time. Consolidation of waste materials and/or final reclamation liner materials appears to be very minimal and decreasing. Additionally, it is highly unlikely that any liquids are leaving the impoundment.

All elevation data provided by Alpha Engineering is presented graphically on the following pages. The first graph shows all monuments (except #10 the baseline point) on a scale that allows all data to be compared. The next five graphs have expanded and equivalent "Y" axes scales in order to more clearly show elevation changes, and for ease of comparison between graphs. A monument location map (provided by Alpha Engineering) is attached on the last page of this document. Included on this map are contours showing approximate total settlement of the top surface since installation of the monuments.

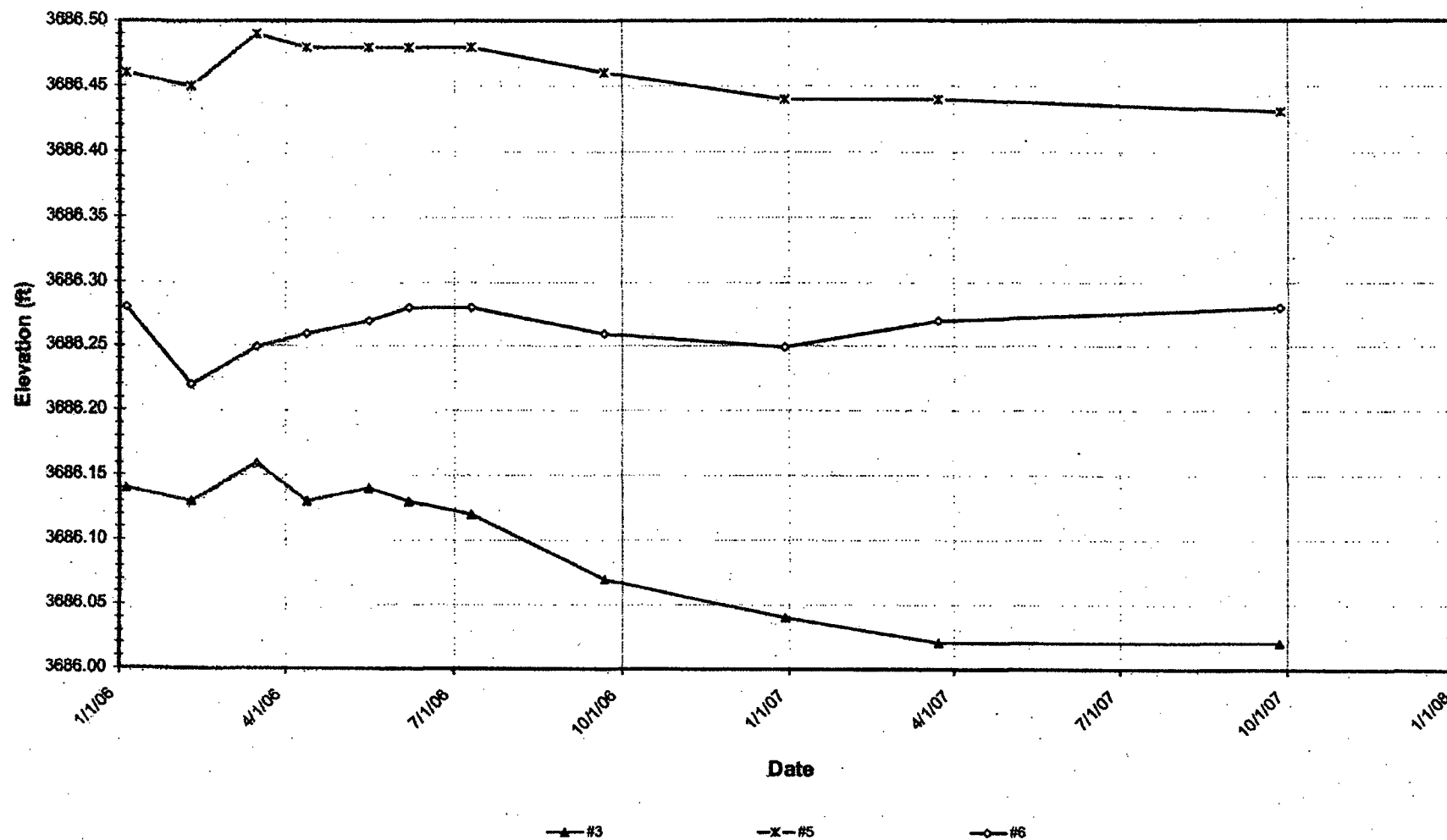
Based on data collected to date, MEI recommends that Hecla continue with their current plan and collect elevation data quarterly. Please call or email me if you have any questions concerning this review.



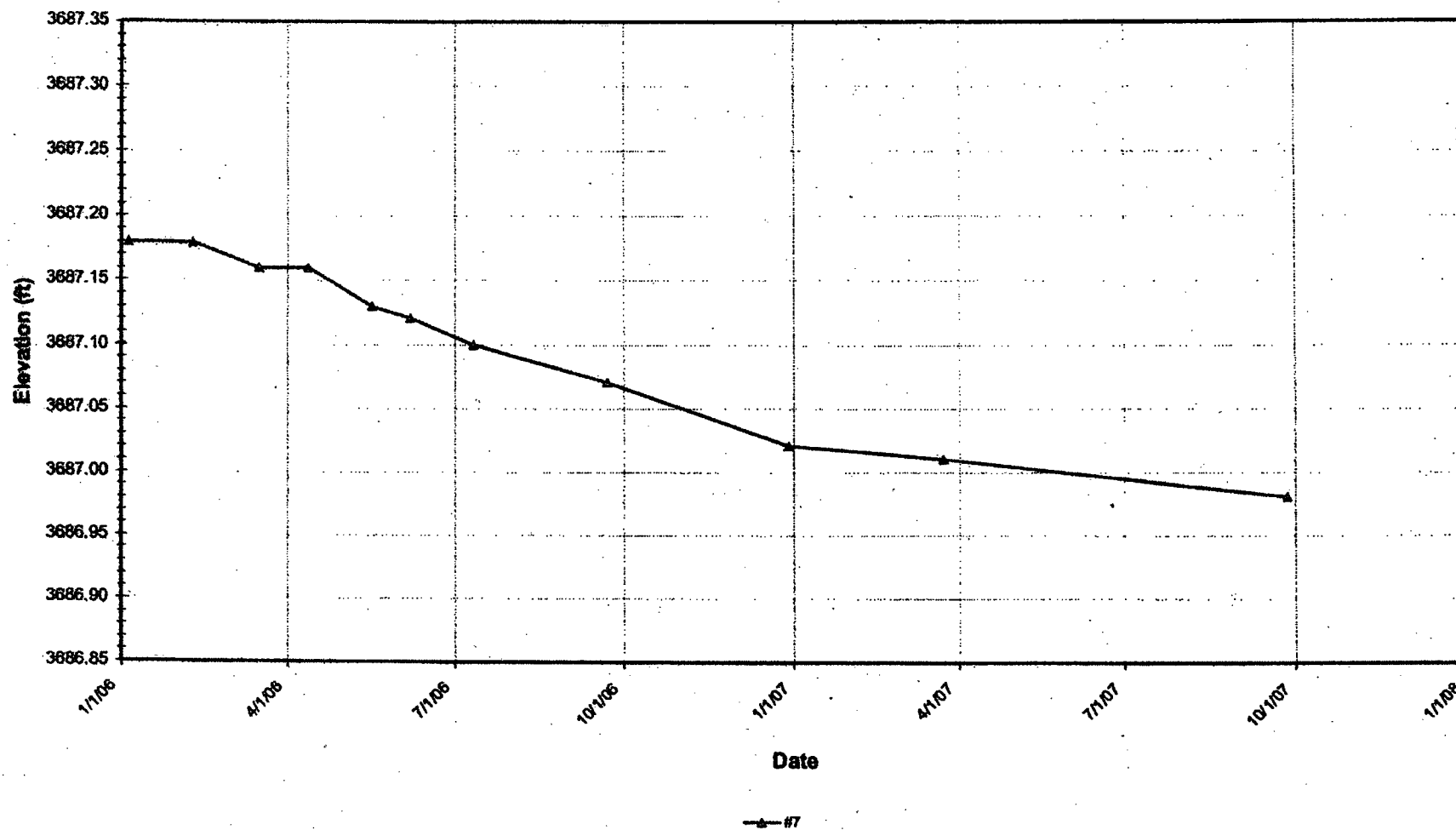
Apex Pond 2 - Settlement Monument Elevations



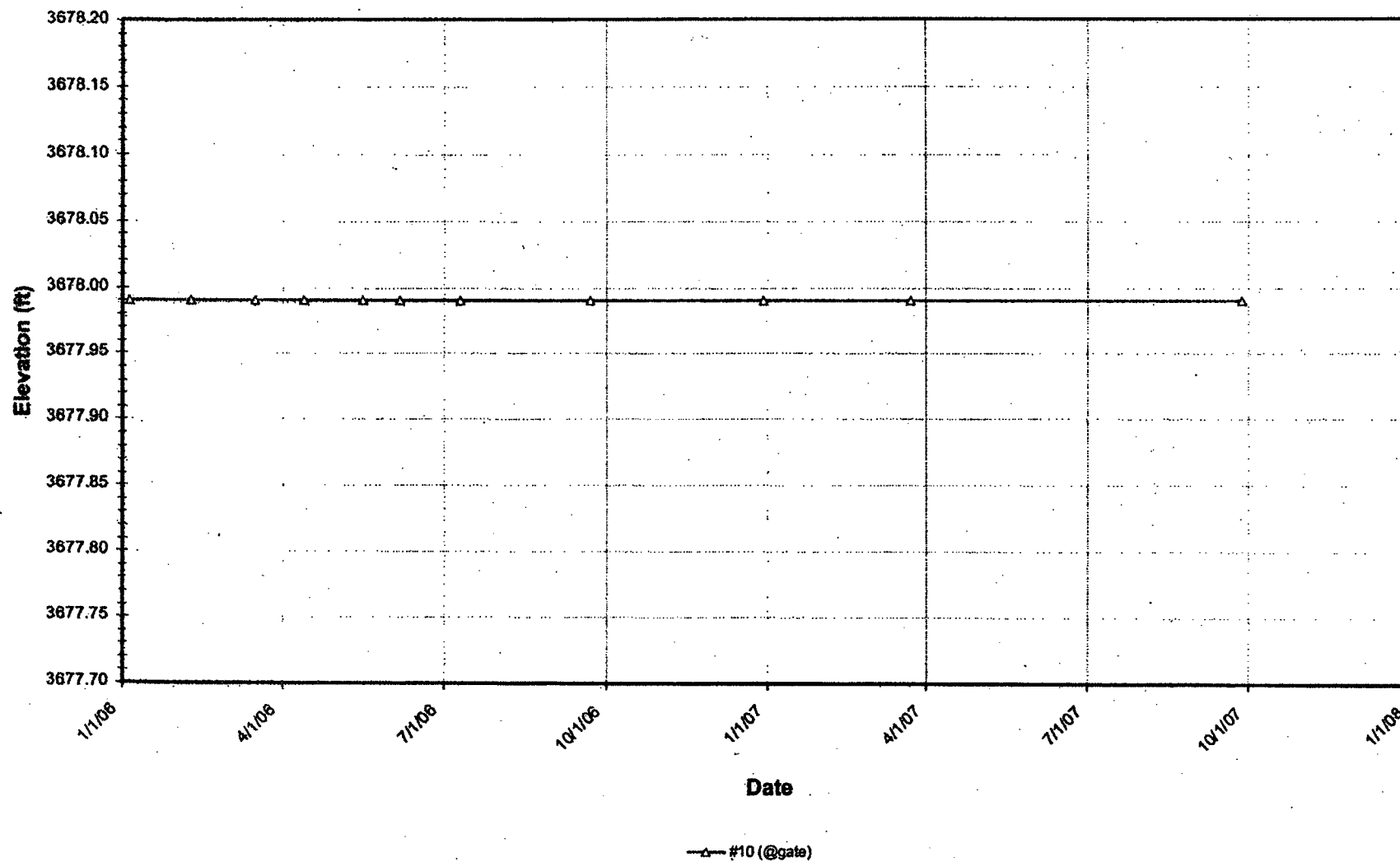
Apex Pond 2 - Settlement Monument Elevations



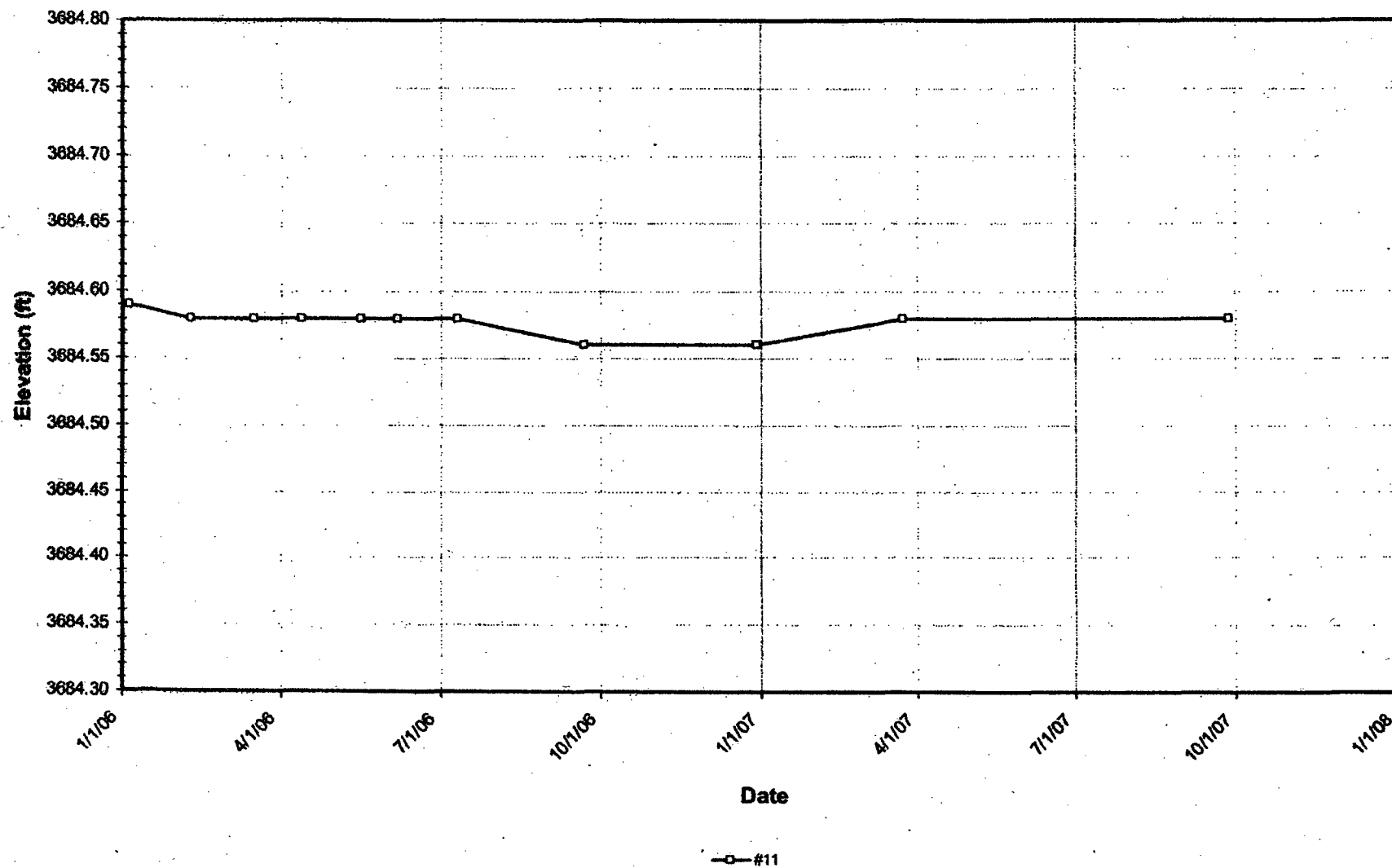
Apex Pond 2 - Settlement Monument Elevations

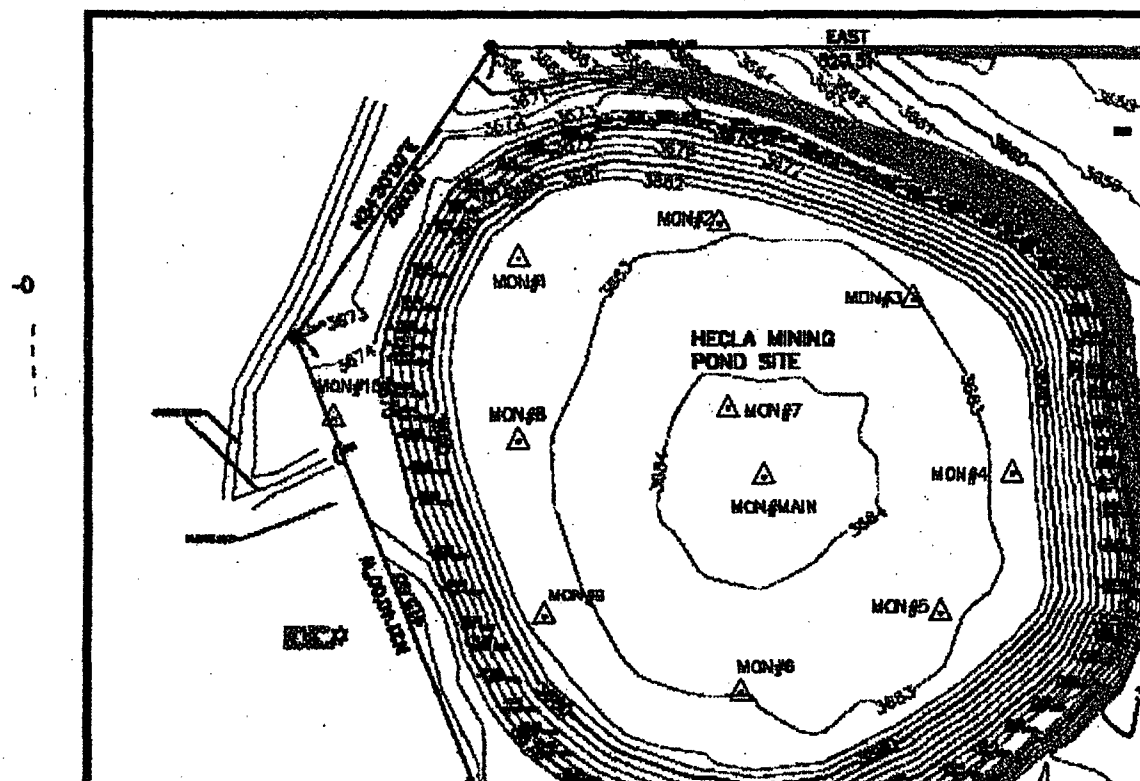


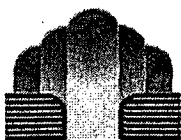
Apex Pond 2 - Settlement Monument Elevations




Apex Pond 2 - Settlement Monument Elevations







Donna
Jackson/P2/R8/USEPA/US
11/20/2007 07:11 AM

To Eric Johnson/ENF/R8/USEPA/US@EPA
cc Amy Swanson/ENF/R8/USEPA/US@EPA, Rebecca
Perrin/P2/R8/USEPA/US@EPA
bcc
Subject Re: Fw: Apex - October Report 

Eric,

As stated in my October 1, 2007 email to you, please send all information relating to Paiute Tribes to Rebecca Perrin. She is now the PO for this tribe.

Donna Jackson
Tribal Program Manager
U.S. Environmental Protection Agency
Region 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone: 303-312-6281
Fax: 303-312-6064

Eric Johnson/ENF/R8/USEPA/US

Eric
Johnson/ENF/R8/USEPA/US
11/20/2007 06:47 AM

To Amy Swanson/ENF/R8/USEPA/US@EPA, Donna
Jackson/P2/R8/USEPA/US@EPA
cc
Subject Fw: Apex - October Report

----- Forwarded by Eric Johnson/ENF/R8/USEPA/US on 11/20/2007 06:47 AM -----



"Paul Glader"
<pglader@hecla-mining.com>
11/19/2007 05:34 PM

To Eric Johnson/ENF/R8/USEPA/US@EPA
cc
Subject Apex - October Report



Apex Pond 2 - progress rpt 42 complete, october 2007.pdf